

Claims

1. A method of producing aluminium alloy sheet material,
5 **characterised in the following steps;**
- continuous strip casting of a sheet at a predetermined solidification rate ensuring material microstructure exhibiting primary particles having average size below 1 micrometer², and
 - (cold) rolling of the strip cast sheet to an appropriate gauge with optionally
10 intermediate annealing during the cold rolling.

2. Method according to claim 1,
characterised in that
the sheets are further annealed during cold rolling.
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3. Method according to claims 1 and 2,
characterised in that
the alloy is cast to 4.5 mm thick strip and cold rolled to 0.58 mm followed
by an intermediate annealing.
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4. Method according to claims 1-3,
characterised in that
the intermediate annealing was undertaken in an air furnace by heating
from room temperature to 340°C at 30°C/hour and soaking at 340°C for 3
25 hours.

5. Method according to claims 1-4,
characterised in that
after cooling from 340°C to 200°C at 50°C/hour, the material was cooled
30 in air.

6. Method according to claims 2-5,
characterised in that
after annealing, the material was further cold rolled to 60 μm .
- 5 7. An aluminium alloy sheet,
characterised in that
its material microstructure exhibits primary particles having average size below 1 micrometer².
- 10 8. Aluminium alloy sheet according to claim 7,
characterised in that
the primary particles are iron-enriched particles ensuring improved pitting corrosion resistance.
- 15 9. Aluminium alloy sheet according to claim 7-8,
characterised in that
at least one of the flat surfaces is coated with a reactive flux retaining coating capable of providing joints in a brazing process, where the flat surface at least partially is coated with a flux retaining composition comprising a synthetic resin based, as its main constituent, on
20 methacrylate homopolymer or a methacrylate copolymer.
10. Aluminium alloy sheet according to claims 7-9,
characterised in that
25 at least one of the flat surfaces is coated with a reactive flux or a normal flux to enable the sheet to be utilised as tube for clad fin in a heat exchanger.
11. Aluminium alloy sheet according to claims 7-9,
characterised in that
30 at least one of the flat surfaces is coated with Al-Si powders to enable the sheet to be utilised as header in a heat exchanger.